wherein said Type I IFN has a sequence consisting essentially of the sequence of

a) a native Type I IFN;

b) a fragment of a) which has Type I IFN receptor agonist or antagonist activity;

c) a variant of a) or b) which has at least 70% sequence identity with a) or b) and which has Type I IFN receptor agonist or antagonist activity; or

d) a variant of a) or b) which is encoded by a DNA sequence which hybridizes to the complement of the native DNA sequence encoding a) or b) under moderately stringent conditions and which has Type I IFN receptor agonist or antagonist activity;

C1 Cont

or a salt or functional derivative of a), b), c), or d) which has Type I IFN receptor agonist or antagonist activity; and

wherein said IFNAR has a sequence consisting essentially of the sequence of

e) a native human IFNAR polypeptide chain;

f) a fragment of e) which has IFNAR receptor agonist or antagonist activity;

g) a variant of e) or f) which has at least 70% sequence identity with e) or f) and which has IFNAR receptor agonist or antagonist activity;

h) a variant of e) or f) which is encoded by a DNA sequence which hybridizes to the complement of the native DNA sequence encoding e) or f) under moderately stringent conditions and which has IFNAR biological activity;

or a salt or functional derivative of e), f), g), or h) which has IFNAR biological activity,

C1 cont

with the proviso that when said Type I IFN and said IFNAR are administered separately and said complex is formed *in vivo*, the amount of IFNAR administered is an amount effective to prolong the *in vivo* effect of the Type I IFN.

13 ~~10~~ (Twice-amended). An isolated molecule comprising a complex of a Type I interferon (IFN) and a subunit of the human interferon α/β receptor (IFNAR) which is capable of binding to the Type I IFN of the complex, in which said Type I IFN is bound to said IFNAR by a covalent bond or a peptide bond,

C2

wherein said Type I IFN has a sequence consisting essentially of the sequence of

a) a native Type I IFN;

b) a fragment of a) which has Type I IFN receptor agonist or antagonist activity;

c) a variant of a) or b) which has at least 70% sequence identity with a) or b) and which has Type I IFN receptor agonist or antagonist activity; or

d) a variant of a) or b) which is encoded by a DNA sequence which hybridizes to the complement of the native DNA sequence encoding a) or b) under moderately stringent conditions and which has Type I IFN receptor agonist or antagonist activity;

or a functional derivative of a), b), c), or d) which has Type I IFN receptor agonist or antagonist activity; and

wherein said IFNAR has a sequence consisting essentially of the sequence of

C2 cont

e) a native human IFNAR polypeptide chain;

f) a fragment of e) which has IFNAR biological activity;

g) a variant of e) or f) which has at least 70% sequence identity with e) or f) and which has IFNAR biological activity; or

h) a variant of e) or f) which is encoded by a DNA sequence which hybridizes to the complement of the native DNA sequence encoding e) or f) under moderately stringent conditions and which has IFNAR biological activity;

C2 cont

or a salt or functional derivative of e), f), g), or h) which has IFNAR biological activity.

27 ~~22~~ (Amended). A pharmaceutical composition consisting essentially of a pharmaceutically acceptable carrier and a complex of a Type I interferon (IFN) and a subunit of the human interferon α/β receptor (IFNAR) which is capable of binding to the type I IFN of the complex,

wherein said Type I IFN has a sequence consisting essentially of the sequence of

a) a native Type I IFN;

b) a fragment of a) which has Type I IFN receptor agonist or antagonist activity;

c) a variant of a) or b) which has at least 70% sequence identity with a) or b) and which has Type I IFN receptor agonist or antagonist activity; or

C3

d) a variant of a) or b) which is encoded by a DNA sequence which hybridizes to the complement of the native DNA sequence encoding a) or b) under moderately stringent conditions and which has Type I IFN receptor agonist or antagonist activity;

or a salt or functional derivative of a), b), c), or d) which has Type I IFN receptor agonist or antagonist activity; and

wherein said IFNAR has a sequence consisting essentially of the sequence of

e) a native human IFNAR polypeptide chain;

f) a fragment of e) which has IFNAR receptor agonist or antagonist activity;

g) a variant of e) or f) which has at least 70% sequence identity with e) or f) and which has IFNAR receptor agonist or antagonist activity; or

h) a variant of e) or f) which is encoded by a DNA sequence which hybridizes to the complement of the native DNA sequence encoding e) or f) under moderately stringent conditions and which has IFNAR receptor agonist or antagonist activity;

or a salt or functional derivative of e), f), g), or h) which has IFNAR biological activity.

12 ~~23~~ (Amended). A method for potentiating the biological effects of Type I interferon (IFN), comprising:

C3 Cont.

administering to a patient in need of Type I IFN therapy a subunit of the human interferon α/β receptor (IFNAR) which is capable of binding to the Type I IFN to be potentiated, in an amount effective to provide such IFN therapy,

wherein said IFNAR has a sequence consisting essentially of the sequence of

a) a native human IFNAR polypeptide chain;

b) a fragment of a) which has IFNAR receptor agonist or antagonist activity;

c) a variant of a) or b) which has at least 70% sequence identity with a) or b) and which has IFNAR receptor agonist or antagonist activity; or

d) a variant of a) or b) which is encoded by a DNA sequence which hybridizes to the complement of the native DNA sequence encoding a) or b) under moderately stringent conditions and which has Type I IFN receptor agonist or antagonist activity;

C3 cont

or a salt or functional derivative of a), b), c), or d) which has IFNAR receptor agonist or antagonist activity.

10 ~~25~~ (Amended). A method in accordance with claim 1, wherein said native human IFNAR polypeptide chain of e) is the extracellular domain of a native human IFNAR polypeptide chain.

21 ~~26~~ (Amended). A molecule in accordance with claim 13 ~~10~~, wherein said native human IFNAR polypeptide chain of e) is the extracellular domain of a native human IFNAR polypeptide chain.

C4

28 ~~27~~ (Amended). A pharmaceutical composition in accordance with claim 27 ~~22~~, wherein said native human IFNAR polypeptide chain of e) is the extracellular domain of a native human IFNAR polypeptide chain.

11 ~~28~~ (Amended). A method in accordance with claim 3, wherein said native human IFNAR polypeptide chain of e) is the

C4 cont extracellular domain of a native human IFNAR polypeptide chain.